

ABSTRACT OF THE DISCLOSURE

FLEXIBLE DESIGN FOR MEMORY USE IN INTEGRATED CIRCUITS

1 A method for designing and using a partially manufactured semiconductor product is
2 disclosed. The partially manufactured semiconductor product, referred to as a slice,
3 contains a fabric of configurable transistors and at least an area of embedded memory.
4 The method contemplates that a range of processors, processing elements, processing
5 circuits exists which might be manufactured as a hardmacs or configured from the
6 transistor fabric of the slice. The method then evaluates all the memory requirements of
7 all the processors in the range to create a memory superset to be embedded into the
8 slice. The memory superset can then be mapped and routed to a particular memory for
9 one of the processors within the range; ports can be mapped and routed to access the
10 selected portions of the memory superset. If any memory is not used, then it and/or its
11 adjoining transistor fabric can become a landing zone for other functions or registers or
12 memories.